

REMARKS

Claims 6 and 18 were cancelled. Thus, Claims 1-5, 7-17 and 19 are currently pending in the present application, of which Claims 1, 7, 11-13 and 19 have been amended.

Support for the amendments to Claim 11 can be found on page 8, lines 17-18.

Rejection under 35 U.S.C. § 103

Claims 1-5, 7-17 and 19 were rejected under 35 U.S.C. § 103(a) as being unpatentable over *Richards et al.* (US 7,207,054) in view of *Hirschi et al* (US 4,470,015). Applicants respectfully traverse such rejection insofar as it might be applied to the claims as amended herein.

Amended Claim 1 now recites a low-noise block (LNB) control device having "a switch circuit for selectively sending said modulating waveform to a summing circuit external to said LNB control device according to said switch control signal, wherein said summing circuit adds said modulating waveform to said DC voltage."

On page 2 of the Office Action, the Examiner characterizes LNB supply and control voltage regulator **30** shown in Figure 2 of *Richards* as the claimed LNB control device. In addition, the Examiner also characterizes SW1 shown in Figure 2 of *Richards* as the claimed switch circuit. However, *Richards*' SW1 does not selectively send a modulating waveform to a summing circuit external to the claimed LNB control device. In fact, Figure 2 of *Richards* does not even show any circuit external to LNB supply and control voltage regulator **30**.

Claim 1 also recites "an LNB signalling module for providing a switch control signal and a modulating waveform."

There are three main components shown within LNB supply and control voltage regulator **30** in Figure 2 of *Richards*, and they are a switch-mode power supply **50**, a reference voltage generator **60** and a linear amplifier **56**. None of the above-mentioned three components can be

characterized as the claimed LNB signalling module for "providing a switch control signal and a modulating waveform."

Amended Claim 11 recites "a filter circuit, coupled to said DC power supply, for filtering said DC signal, wherein said filter circuit includes an inductor, a resistor and a capacitor connected in parallel."

On page 4 of the Office Action, the Examiner asserts that the claimed filter circuit is taught by *Richards* as an LC filter for by inductor **84** and capacitor **90** in col. 6, lines 60-61. *Richards*'s LC filter only includes an inductor and a capacitor connected in series. In contrast, the claimed filter circuit includes an inductor, a resistor and a capacitor connected in parallel.

Claim 11 also recites "a low-noise block (LNB) control device ... for receiving a power supply feedback signal from said DC power supply to generate a power supply control signal to said DC power supply, and for generating a modulating signal."

On page 4 of the Office Action, the Examiner asserts that the claimed LNB control device is disclosed by *Richards* in Figure 3. However, according to *Richards*, the entire circuit in Figure 3 is a switch-mode power supply (col. 3, lines 48-49), which may be related to the claimed DC power supply, but is definitely not related to the claimed LNB control device that is coupled to the claimed DC power supply.

Because the cited references, whether considered separately or in combination, do not teach or suggest all the features of the claimed invention, the § 103 rejection is believed to be overcome.

CONCLUSION

Claims 1-5, 7-17 and 19 are currently pending in the present application. For the reasons stated above, Applicants believe independent Claims 1 and 11 along with their respective dependent claims are distinguished over the cited references under § 103, and should be in condition for allowance. The remaining prior art cited by the Examiner, but not relied upon, has been reviewed and is not believed to show or suggest the claimed invention.

No fee or extension of time is believed to be necessary; however, in the event that any fee or extension of time is required for the prosecution of the present application, please charge it against Dillon & Yudell Deposit Account No. **50-3083**.

Respectfully submitted,



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